Title: DIVISION STATISTICAL TECHNIQUES	Number: D65-20-01	Revision No.: OD	Effective Date: 31 JAN 97
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STANDARD OPERATING PROCEDURE D65-20-01

From: D65
To: D65 Division

Subj: DIVISION STATISTICAL TECHNIQUES

Ref: (a) SOP D65-09-01, Division Process Control
(b) SOP D65-10-01, Division Receiving Inspection
(c) SOP D65-10-02, Division In-process Inspections
(d) SOP D65-10-03, Division Final Inspection

1. Purpose. To establish a system and provide instructions for production process analyses and improvement and for performing inspection activities.

2. Scope and Application. This procedure applies to all production and inspection activities that require the use of statistical techniques.

3. Policy. Division processes that are critical to products meeting specifications, particularly close tolerance specifications, will be periodically evaluated using metrics (statistical techniques) to ensure they are adequately controlled and that excessive variability or potential "out of tolerance" conditions are detected early before product quality is impacted.

4. Procedure. This procedure provides general guidance for both identification of processes that may require statistical control and statistical sampling.

a. Process Control - Production and/or Quality Assurance (QA) may require that the performance of certain processes be analyzed using statistical techniques to ensure the necessary level of control and early detection of excessive variability (potential "out of tolerance" conditions). QA and Engineering will assist Production in determining the appropriate methods, metrics, charting, and analysis of affected processes. QA will provide the necessary training for process operators. The use of statistical techniques for control of specific processes is documented in the procedures (work instructions) for these processes.

b. Statistical Sampling - When required, statistical sampling will be employed for new design verification, receiving inspections, and in-process inspections. Sample sizes will be determined based upon size of the production lot, process complexity, and product quality history. Final inspections will not use statistical sampling, as the finished products are inspected at 100 percent. Statistical sampling conforms to MIL-STD-105. The use of statistical sampling for specific inspections is documented in procedures (work instructions) for these inspections.

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